



NEW MEXICO
ENVIRONMENT DEPARTMENT



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GROUND WATER QUALITY BUREAU
DISCHARGE PERMIT – RENEWAL AND MODIFICATION
Issued under 20.6.2 NMAC

TEMPO AI#: 2562
GWQB Discharge Permit No: DP-471
Facility Name: Kit Carson Farms

Permittee Name: Rena Carson
Mailing Address: Po Box 101, Rincon, NM 87940

Permitting Action: Renewal & Modification
Source Classification: Agriculture - Crop

Facility Location: 211 Saint Elaine Rd, Rincon
Section 7, Township 19S, Range 02W

County: Doña Ana

Agriculture Compliance Contact Matthew Smith
Phone No. (505) 827-2797

EFFECTIVE DATE: DATE

TERM ENDS: EXP DATE

Michelle Hunter
Chief, Ground Water Quality Bureau

[Subsection H of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.I]

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PART A GENERAL INFORMATION

A100 Introduction

- A. The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal and Modification (Discharge Permit), **DP-471**, to Rena Carson (permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978, §§ 74-6-1 through 74-6-17, and the New Mexico Ground and Surface Water Protection Regulations, 20.6.2 NMAC. NMED's purpose in issuing this Discharge Permit is to control the discharge of water contaminants from Kit Carson Farms (facility) for the protection of groundwater and those segments of surface water gaining from groundwater inflow, for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health.
- B. The permittee is discharging up to 26,000 gallons per day (gpd) of effluent from Kit Carson Farms. This discharge or leachate may move directly or indirectly into groundwater of the State of New Mexico which has an existing concentration of 10,000 milligrams per liter (mg/L) or less of total dissolved solids (TDS) within the meaning of Section 20.6.2.3104 and Subsection A of 20.6.2.3101 NMAC. The discharge may contain water contaminants or toxic pollutants elevated above the standards of Section 20.6.2.3103 NMAC.
- C. In issuing this Discharge Permit, NMED has determined that the requirements of Subsection C of 20.6.2.3109 NMAC have been or will be met. Pursuant to Section 20.6.2.3104 NMAC, it is the responsibility of the permittee to comply with the terms and conditions of this Discharge Permit; failure may result in an enforcement action(s) by NMED (20.6.2.1220 NMAC).

A101 Terms of Permit Issuance

- A. **Permit Duration** - Pursuant to WQA 74-6-5(I) and Subsection H of 20.6.2.3109 NMAC, the term of a Discharge Permit shall be for the fixed term of **five (5) years** from the effective date of the Discharge Permit.
- B. **Permit Modification** – Modification to existing DP-471 represented herein consist of a decrease in the maximum daily discharge volume from 35,000 to 26,000 gpd.
- C. **Permit Fees** – Payment of permit fees is due at the time of Discharge Permit approval. Permit fees shall be paid in a single payment or shall be paid in equal installments on a yearly basis over the term of the Discharge Permit. Single payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date. Initial installment payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date; subsequent installment payments shall be remitted to NMED no later than the anniversary of the Discharge Permit effective date. Permit fees are associated with issuance of this Discharge Permit. Nothing in this Discharge Permit shall be construed as relieving the permittee of the obligation to pay all permit fees assessed by NMED. A permittee that ceases discharging or does not commence discharging from the facility during the term of the Discharge Permit shall pay all permit fees assessed by NMED. An approved Discharge Permit shall be suspended or terminated if the facility fails to remit an installment payment by its due date. [Subsection F of 20.6.2.3114 NMAC, NMSA 1978, § 74-6-5.K]

- D. **Permit Renewal** - To renew this Discharge Permit, the permittee shall submit, in accordance with Section G of 20.6.2 NMAC, an application and any associated fees for renewal, renewal and modification, or renewal for closure at least 120 days before the discharge permit expiration date, unless closure of the facility is approved by NMED before that date.
- E. **Transfer of Ownership** - This Discharge Permit is being issued to Rena Carson (permittee) as identified in **Section A100** above. In accordance with Section 20.6.2.3111 NMAC, the permittee, any listed owner(s) of record, and any [other] holder(s) of an expired discharge permit are responsible for complying with the conditions listed herein. If during the duration of this Discharge Permit a change in the list of responsible parties is required, transfer of ownership shall be completed in accordance with Section 20.6.2.3111(A).

A102 Applicable Regulations

- A. **Scope** - This Discharge Permit applies solely for the regulation of process wastewater or stormwater generated as a result of facility operations and does not include regulation of domestic wastewater at the facility. Domestic wastewater generated at the facility is treated or disposed of pursuant to 20.7.3 NMAC.
- B. The discharge from the facility is not subject to any of the exemptions of Section 20.6.2.3105 NMAC.
- C. Groundwater quality as observed in on-site monitoring wells is subject to the criteria of Sections 20.6.2.3101 and 20.6.2.3103 NMAC unless otherwise specified in this Discharge Permit.
- D. Complying with the applicable requirements of 20.6.2 NMAC does not relieve a facility's owner, operator or permittee from complying with the requirements of other applicable local, state and federal regulations or laws.

A103 Facility: Physical Description

- A. This facility is located at 211 Saint Elaine Rd, Rincon, in Section 7, Township 19S, Range 02W, Doña Ana County.
- B. This facility is comprised of the following wastewater system components as identified in the application dated December 3, 2018 and the administrative record (which includes the original Discharge Permit which was issued on July 13, 1994 and subsequently renewed on July 11, 2000) as of the effective date of this Discharge Permit:
1. Sumps
 - a. **Sump-1** – a concrete sump, located on the south side of the Kit Carson production area to capture water from the Kit Carson production area prior to following to Sump-2. From sump-2 water is pumped to Field-1
 - b. **Sump-2** – a three cell series concrete sump, located approximately 250 feet south of the Kit Carson production area and west of the tote washing area. Wastewater from the tote washing operation flows into cell-1(closest cell to tote washing building). Wastewater from the Kit Carson production area flows from Sump-1 into Cell-2 (the

middle cell). The wastewater streams then flow into cell-3 (closet cell to surface disposal area) to be pumped to the surface disposal area.

2. Fields or tracts within the land application area or surface disposal area:
 - c. **Field 1** – covers 13 acres and is located directly west of the facility. Field 1 has never before received wastewater. Wastewater is surface disposed of by flood irrigation.
 - d. **Old Fields 1 & 2** – covered up to 2 acres and were located south of the Kit Carson production area and west of the Tote Washing operation. These fields have been abandoned.

These system components are identified as potential sources of groundwater contamination. A list of all wastewater system components authorized to discharge under this Discharge Permit is provided in **Section B100**.

A104 Facility: Documented Hydrogeologic Conditions

- A. Groundwater most likely to be affected at this facility is at a depth of approximately 14 feet and has a total dissolved solids concentration of 3,110 milligrams per liter.

PART B FACILITY SPECIFIC REQUIREMENTS

B100 Facility: Authorized Discharge

- A. Prior to discharging for the 2020 processing season, the permittee shall submit an up-to-date diagram of the layout of entire facility to NMED. The diagram shall include the following elements:
 - north arrow
 - effective date of the diagram
 - overall facility layout
 - sumps
 - solids separators/settling basins
 - zones within the surface disposal area with identification and acreage labeled
 - ground water monitoring wells
 - irrigation wells
 - meters measuring wastewater discharges to the sump
 - meters measuring wastewater applied to the surface disposal area
 - wastewater distribution pipelines
 - each ditch irrigation system, acequia, irrigation canal and drain
 - backflow prevention methods or devices
 - wastewater sampling locations
 - septic tanks and leachfields

Any element that cannot be directly shown due to its location inside of existing structures, or because it is buried without surface identification, shall be on the diagram in a schematic format and identified as such. [Subsection C of 20.6.2.3106 NMAC, Subsection A of 20.6.2.3107 NMAC]

B. The permittee is authorized to discharge water contaminants as part of facility operations subject to the following requirements:

1. The permittee is authorized to discharge up to 26,000 gpd of wastewater from the production area. Up to 21,000 gpd of wastewater generated from the Kit Carson Farms production area flows to a concrete sump (Sump-1) and is pumped through a mechanical solids separator to secondary sump (Sump-2) for discharge to the 13 acre surface disposal area. Up to 5,000 gpd of wastewater garnered from the tote washing operation flows directly to Sump-2 for discharge to the 13-acre surface disposal area.
2. The permittee is authorized to apply wastewater to **Field-1** within the surface disposal area in accordance with Subsection C of 20.6.2.3109 NMAC. The surface disposal area is comprised of 13 acres.
3. This Discharge Permit authorizes only those discharges specified herein. Any unauthorized discharges, such as spills or leaks, violate Section 20.6.2.3104 NMAC and must be reported to NMED and remediated as required by Section 20.6.2.1203 NMAC.

B101 Facility: Existing System Controls

A. The following existing system controls at this facility shall be required as described below:

1. **Sumps** - The permittee shall maintain operations of the existing sumps as listed in **Section A103** above in accordance with conditions listed in **Table B2** to achieve compliance with this Discharge Permit. The wastewater impoundment system shall be designed to achieve compliance with the storage capacity requirements of Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC.
2. **Flow Meters** - The facility measures the volume of (1) wastewater discharged from the production area and (2) wastewater and stormwater discharged to the land application area using the following flow meters [Subsection A of 20.6.2.3107 NMAC]:
 - a. **Rincon Supply Meter** - located at the production area to measure the volume of all fresh water contributing to the generation of wastewater; providing an estimate of the volume of wastewater generated from Kit Carson Farms production area.
 - b. **Tote Meter** - located on the discharge line from the tote washing operation to measure the volume of wastewater discharged from the tote washing area to Sump-2.
3. **Monitoring Wells** - The facility uses the following monitoring wells to supply data representative of groundwater quality [Subsection A of 20.6.2.3107 NMAC]:
 - a. **MW-3R** – a replacement well hydrologically upgradient of all contamination sources at the facility, required to be installed by this Discharge Permit.
 - b. **MW-2R** – a replacement well hydrologically downgradient of the former surface disposal fields 1 & 2, required to be installed by this Discharge Permit.
 - c. **MW-1** – hydrologically downgradient of Field-1 and located southwest of the Kit Carson Farms production area.

B102 Facility: Conditions for Operation

- A. Impoundment(s) or Sump(s) - The permittee shall manage all impoundments or sump(s) at the facility in accordance with 20.6.2.3107 and 20.6.2.3109 NMAC and the conditions summarized in Table B1 below.

Table B1
Impoundment(s) or Sump(s)

Engineering, Surveying and Construction and/or Improvements	
a) None required.	
Operations and Maintenance of All Impoundments or Sumps	
b) None required.	
Inspection and Monitoring All Impoundments or Sumps	
c) The permittee shall collect composite wastewater samples from the concrete sump (Sump-2) <i>once within two weeks of commencement of the processing season, once at the midpoint of the processing season, and once within two weeks of the anticipated cessation of the processing season.</i> The wastewater sampling shall be performed according to the following procedure:	
<ul style="list-style-type: none"> Wastewater samples shall be collected from for each respective waste stream sump located adjacent to Sump-2 one hour after the start of production, three hours after the start of production, and five hours after the start of production from each; A single composite sample shall be created by combining equal volumes of the grab samples; and The composite sample shall be analyzed for NO₃-N, TKN, TDS, Cl and pH. The permittee shall record the sampling date, time production started, time of the first grab sample, time of second grab sample, time of third grab sample, and time production ended on a Wastewater Sampling Log (copy enclosed). Results shall be used in the completion of Surface Disposal Data Sheets as required by this Discharge permit. 	
The Wastewater Sampling Log, analytical results and laboratory reports shall be submitted to NMED in the quarterly monitoring reports	
d) The permittee shall inspect the concrete sump on a quarterly basis and clean as needed to prevent pump failure. The permittee shall maintain a record of sump inspections, repairs and cleanings. Solids generated in the processing area shall be stored and transported off-site in accordance with the conditions of this Discharge Permit.	
Recordkeeping and Reporting All Impoundments or Sumps	
e) Report any unauthorized discharges to NMED pursuant to 20.6.2.1203 NMAC.	
f) Unless otherwise specified in this Discharge Permit, submit all monitoring information in accordance with the general reporting schedule listed in Table C1 of this Discharge Permit.	
g) Notify NMED within 24 hours of discovery of any observed condition(s) that may impact the structural integrity that may result in an unauthorized discharge.	
h) Maintain written records at the facility of all facility inspections including repairs and replacements.	

- B. Land Application or Surface Disposal Area Management - The permittee shall manage all land application areas at the facility in accordance with 20.6.2.3107 and 20.6.2.3109 NMAC and the conditions summarized in **Table B2** below.

Table B2
Land Application or Surface Disposal Area Management

Engineering and Surveying	
a) Prior to discharging for the 2020 processing season , the permittee shall install concrete-lined ditches or PVC piping to distribute wastewater to the surface disposal area, and submit photographic documentation and a written statement confirming the date(s) of installation.	
b) Any irrigation or supply wells located within the land application area shall have a surface pad constructed in accordance with the recommendations of Subsection G of 19.27.4.29 NMAC and a permanent well cap or cover pursuant to Subsection I of 19.27.4.29 NMAC.	
Operations and Maintenance All Land Application or Surface Disposal Areas	
c) The permittee shall discharge wastewater to the surface disposal area such that the amount of total nitrogen discharged does not exceed 200 pounds per acre in any 12-month period. Nitrogen content shall not be adjusted to account for volatilization or mineralization processes. Wastewater shall be distributed evenly throughout the entire disposal area. Excessive ponding shall be prevented.	
Inspection and Monitoring All Land Application or Surface Disposal Areas	
d) The permittee shall visually inspect the concrete-lined ditch system or PVC piping on a monthly basis to ensure proper maintenance. Any damage to a lined ditch or PVC piping shall be repaired within 30 days of discovery. The permittee shall document all inspection findings and repairs made in a log kept on-site that is available to NMED upon request.	
e) The permittee shall maintain 18-inch to 24-inch berms around the surface disposal area to prevent surface water run-on and run-off. The berms shall be inspected on a regular basis and after any major precipitation event, and repaired as soon as possible following discovery of the damage.	
Recordkeeping and Reporting All Land Application Areas or Surface Disposal	
f) The permittee shall complete Surface Disposal Data Sheets (SDDS; copy enclosed) on a monthly basis that document the amount of nitrogen applied to the surface disposal area during the most recent 12 months. The SDDS shall reflect the total nitrogen concentration from the most recent wastewater analysis and the measured discharge volumes to the surface disposal area for each month. The SDDS shall be completed with information above or shall include a statement that wastewater disposal did not occur. The SDDS shall be submitted to NMED in the <u>quarterly monitoring reports</u> .	

- C. **Solids Management** - The permittee shall manage all solids at the facility in accordance with 20.6.2.3107 and 20.6.2.3109 NMAC and the conditions summarized in **Table B3** below.

Table B3
Solids Management

Engineering and Surveying
a) None required.
Operations and Maintenance
b) The permittee shall store and remove solids separated from the wastewater in a manner and frequency necessary to prevent the contamination of ground water. Solids collected by the screen separator and removed from the sump shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations. Disposal of solids on the surface disposal area is prohibited. Prior to off-site disposal, any solids stored at the facility shall be managed to minimize the generation and infiltration of leachate by diverting stormwater run-on and run-off and by preventing the ponding of

Table B3
Solids Management

water within solids stockpiling. – OR- Solids shall be contained in a waste disposal bin prior to being hauled offsite for final disposal.
Inspection and Monitoring
c) None required.
Recordkeeping and Reporting
d) None required.

- D. **Flow Meters** – Pursuant to 20.6.2.3107 (A) and 20.6.2.3109 (C), the permittee shall employ a flow metering system that uses flow measurement devices (flow meters) to measure the volume(s) of 1) wastewater discharged from the production area and 2) wastewater transferred and land applied at the facility. All flow meters employed at the facility shall be managed in accordance with the conditions listed in **Table B4** below.

Table B4
Flow Meters

Engineering and Surveying
a) None required.
Operations and Maintenance
b) All flow meters shall be calibrated in accordance with the manufacturer's requirements prior to installation or reinstallation following repair.
Inspection and Monitoring
c) Using flow meter installed on the facility supply line, directly measure the volume of all fresh water contributing to the generation of wastewater; providing an estimate of the volume of wastewater generated from kit farms production area. The monthly meter readings, estimated monthly and average daily discharge volumes, and notes (i.e a clear designation of the well, the date of the meter reading, a decimal point in the number, and the units of the number) shall be submitted to NMED in the semi-annual monitoring reports due by February 1 and August 1 of each year.
d) The permittee shall measure the monthly volume of tote washing wastewater discharged to Sump-2. The permittee shall obtain readings from a totalizing flow meter (Tote Meter) located on the discharge line between the processing area and the Sump-2 on a monthly basis and calculate the monthly and average daily volume discharged to Sump-2. The monthly meter readings, and calculated monthly and average daily discharge volumes shall be submitted to NMED in the semi-annual monitoring reports due by February 1 and August 1 of each year.
e) The permittee shall utilize the monthly meter readings obtained from the facility Supply Meter and Tote Meter to calculate the total volume of wastewater discharged from the facility on monthly basis by combining the two volumes. The combined monthly meter readings, and calculated monthly and average daily discharge volumes shall be submitted to NMED in the semi-annual monitoring reports due by February 1 and August 1 of each year.
f) Visually inspect flow meters on a weekly basis for evidence of malfunction. If a visual inspection indicates a flow meter is not functioning to measure flow, the permittee shall initiate repair or replacement of the meter within 30 days of discovery.
Recordkeeping and Reporting

Table B4
Flow Meters

<p>g) Within 30 days of the effective date of this discharge permit (by DATE), submit a <u>Confirmation of Installation</u> report to NMED that includes: a description of the device type, manufacturer, meter identification, location, record drawings, and a copy of the manufacturer's certificate of calibration and a copy of the manufacturer's recommended maintenance schedule.</p> <p>h) Maintain copies of the manufacturer's certificate of calibration and the manufacturer's recommended maintenance schedule at the facility.</p> <p>i) Record of meter readings at intervals not to exceed monthly. The average daily discharge volume for each recording interval shall be calculated by dividing the difference between the meter readings by the number of days between meter readings.</p> <p>j) Record meter readings (without adjustments or deductions) and submit in the <u>Semi-annual Monitoring Report</u>. Include the date, time and units of each measurement, and calculations for the average daily volumes of wastewater discharged from the processing area, reported in gallons per day.</p> <p>k) For meters requiring repair, submit a report to NMED with the next scheduled monitoring report following the repair that includes a description of the malfunction, a statement verifying the repair, and a copy of the manufacturer's or repairer's certificate of calibration.</p> <p>l) For meters requiring replacement, submit a report to NMED with the next scheduled monitoring report following the replacement that includes plans for the device, a copy of the manufacturer's certificate of calibration, and a copy of the manufacturer's recommended maintenance schedule.</p>
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- E. **Monitoring Wells** - Pursuant to 20.6.2.3107 (A) and 20.6.2.3109 (C), the permittee is required to install monitoring wells at appropriate depths and locations to monitor groundwater quality. The approved groundwater monitoring well system at the facility is detailed in **Table B5** below.

Table B5
Groundwater Monitoring Wells

Engineering and Surveying
<p>a) Within 60 days following the effective date of this Discharge Permit (by DATE), the permittee shall submit a written monitoring well location proposal for review and approval by NMED. The proposal shall designate the locations of all monitoring wells required to be installed by this Discharge Permit. The proposal shall include, at a minimum, the following information:</p> <ul style="list-style-type: none">• A map showing the proposed location of the monitoring well(s) from the boundary of the source it is intended to monitor• A written description of the specific location proposed for the monitoring well(s) including the distance (in feet) and direction of the monitoring well(s) from the edge of the source it is intended to monitor. Examples include: 35 feet north-northwest of the northern berm of the synthetically lined impoundment; 30 feet southeast of the land application area; 150 degrees from north• A statement describing groundwater flow direction beneath the facility, and documentation and/or data supporting the determination

Table B5
Groundwater Monitoring Wells

<p>All proposed monitoring well locations shall be approved by NMED prior to installation. [NMSA 1978, § 74-6-5.D, Subsection B of 20.6.2.3109 NMAC]</p> <p>b) Survey all new facility groundwater monitoring wells upon installation in accordance with Subsection A of 20.6.2.3107 NMAC.</p>
<p>Operations and Maintenance</p> <p>c) Within 90 days following written approval from NMED for proposed monitoring well location(s), install and complete the following additional groundwater monitoring wells:</p> <ul style="list-style-type: none">• MW-2R, hydrologically downgradient of old Fields 1 & 2.• MW-3R, hydrologically upgradient of all contamination sources at the facility. <p>All new wells shall be completed in accordance with the attachment titled <i>Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011</i>. Construction and lithologic logs shall be submitted to NMED within 30 days of well completion.</p> <p>e) Following installation of the monitoring wells required to be installed by this Discharge Permit, the permittee shall sample ground water in the wells and analyze the samples for dissolved TKN, NO₃-N, TDS and Cl. Ground water sample collection, preservation, transport and analysis shall be performed according to the following procedure:</p> <ul style="list-style-type: none">• Measure the depth-to-most-shallow ground water from the top of the well casing to the nearest hundredth of a foot.• Purge three well volumes of water from the well prior to sample collection.• Obtain samples from the well for analysis.• Properly prepare, preserve and transport samples.• Analyze samples in accordance with the methods authorized in this Discharge Permit. <p>Depth-to-most-shallow ground water measurements, analytical results, including the laboratory QA/QC summary report, and a facility layout map showing the location and number of each well shall be <u>submitted to NMED within 45 days of the installation of the monitoring wells</u>.</p>
<p>Inspection and Monitoring</p> <p>f) Perform quarterly groundwater sampling for all facility monitoring wells as identified in Section B101 A.3 and analyze the samples for dissolved TKN, NO₃-N, TDS and Cl. Groundwater sample collection, preservation, transport and analysis shall be performed according to the following procedure:</p> <ul style="list-style-type: none">• Measure the depth-to-most-shallow ground water from the top of the well casing to the nearest hundredth of a foot.• Purge three well volumes of water from the well prior to sample collection.• Obtain samples from the well for analysis.• Properly prepare, preserve and transport samples.• Analyze samples in accordance with the methods authorized in this Discharge Permit. <p>Depth-to-most-shallow ground water measurements, analytical results, including the laboratory QA/QC summary report, and a facility layout map showing the location and number of each well shall be submitted to NMED in the semi-annual monitoring reports due by February 1 and August 1 of each year.</p>

Table B5
Groundwater Monitoring Wells

- g) The permittee shall develop a ground water elevation contour map on a **quarterly** basis using the top of casing elevation data from the monitoring well survey and quarterly depth-to-most-shallow ground water measurements obtained from the ground water monitoring wells required by this Discharge Permit.

The ground water elevation contour map shall depict the ground water flow direction based on the ground water elevation contours. Ground water elevations between monitoring well locations shall be estimated using common interpolation methods. A contour interval appropriate to the data shall be used, but in no case shall the interval be greater than two feet. Ground water elevation contour maps shall depict the ground water flow direction, using arrows, based on the orientation of the ground water elevation contours, and the location and identification of each monitoring well and contaminant source. The ground water elevation contour map shall be submitted to NMED in the semi-annual monitoring reports due by **February 1 and August 1 of each year.**

- h) Prior to the expiration date of this Discharge Permit, NMED shall have the option to perform one downhole inspection of each monitoring well identified in this Discharge Permit. NMED shall establish the inspection date and provide at least 60 days' notice to the permittee by certified mail. The permittee shall have any existing dedicated pumps removed at least 48 hours prior to NMED inspection to allow adequate settling time of any sediment agitated as a result of pump removal.

Recordkeeping and Reporting

- i) Within 60 days of well completion, the permittee shall survey all wells approved by NMED for Discharge Permit monitoring purposes to a U.S. Geological Survey (USGS) or other permanent benchmark. Survey data shall include northing, easting and elevation to the nearest hundredth of a foot or shall be in accordance with the "Minimum Standards for Surveying in New Mexico" (12.8.2 NMAC). A survey elevation shall be established at the top-of-casing, with a permanent marking indicating the point of survey. The survey shall bear the seal and signature of a licensed New Mexico professional surveyor (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority).

Depth-to-most-shallow ground water shall be measured to the nearest hundredth of a foot in all surveyed wells, and the data shall be used to develop a ground water elevation contour map showing the location of all monitoring wells and the direction and gradient of ground water flow at the facility. The data and ground water elevation contour map shall be submitted to NMED within 30 days of survey completion.

- j) A **Semi-Annual Monitoring Report** shall be filed with NMED in accordance with the general reporting schedule listed in **Table C1**. Each **Semi-annual Monitoring Report** shall contain, at a minimum, the following information:

- Facility map with location and number of each well in relation to the contamination source it is intended to monitor
- Depth-to-shallowest groundwater measurements (collected quarterly)
- Field parameter measurements and parameter stabilization log (collected quarterly)
- Analytical results (including the laboratory quality assurance and quality control summary report) (conducted quarterly)
- Groundwater elevation contour maps utilizing elevation contours of 2 ft or less (developed quarterly)

B103 Facility: Conditions for Closure

- A. Upon closure of the facility, the permittee shall perform the following closure measures:
- B. For permanent closure, the following closure actions shall be completed upon permanent cessation of wastewater discharge:
1. Notify NMED of closure plans within 30 days of cessation.
 2. Provide NMED with a **Disposal Plan** for closure activities: Implement **Disposal Plan** upon NMED approval.
 3. Empty all facility impoundments of wastewater within 6 months of cessation.
 4. Empty all facility impoundments of stormwater within 1 year of cessation.
 5. Perforate or remove impoundment liner(s), as applicable, re-grade impoundments with clean fill, and blend area with surrounding surface topography to prevent ponding within 2 years of cessation
 6. Dispose all wastes according the approved **Disposal Plan**.
 7. Following completion of the closure activities above, continue groundwater monitoring as required by this Discharge Permit for two years to confirm the absence of groundwater contamination. If monitoring results show that the groundwater standards in Section 20.6.2.3103 NMAC are being violated, the permittee shall implement the contingency plan required by this Discharge Permit.
 8. Following notification from NMED that post-closure monitoring may cease, the permittee shall plug and abandon the monitoring well(s) in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions*, Revision 1.1, March 2011.
 9. When all closure and post-closure requirements have been met, the permittee may request to terminate the Discharge Permit [20.6.2.3109 NMAC, 20.6.2.3107. NMAC].

B104 Facility: Contingency Plan

- A. In the event NMED or the permittee identifies any failures of the Discharge Permit or system not specifically noted herein, NMED may require the permittee to develop for NMED approval a contingency or corrective action plan and schedule to cope with the failure(s) [20.6.2.3107.A(10) NMAC].
- B. Facility conditions that will invariably require permittee action under one or more contingency plans include:
1. **Exceedance of groundwater quality standards** – In the event that ground water monitoring indicates that a ground water quality standard identified in Section 20.6.2.3103 NMAC is exceeded; the total nitrogen concentration in ground water is greater than 10 mg/L; or a toxic pollutant (defined in Subsection WW of 20.6.2.7 NMAC) is present in a ground water sample and in any subsequent ground water sample collected from a monitoring well required by this Discharge Permit, the permittee shall enact the following contingency plan:

Within 60 days of the subsequent sample analysis date, the permittee shall propose measures to ensure that the exceedance of the standard or the presence of a toxic pollutant will be mitigated by submitting a corrective action plan to NMED for approval. The corrective action plan shall include a description of the proposed actions to control the source and an associated completion schedule. The plan shall be enacted as approved by NMED.

Once invoked (whether during the term of this Discharge Permit; or after the term of this Discharge Permit and prior to the completion of the Discharge Permit closure plan requirements), this condition shall apply until the permittee has fulfilled the requirements of this condition and ground water monitoring confirms for a minimum of two years of consecutive ground water sampling events that the standards of Section 20.6.2.3103 NMAC are not exceeded and toxic pollutants are not present in ground water.

2. **Ineffective groundwater monitoring well(s)** – In the event that information available to NMED indicates that a well(s) is not constructed in a manner consistent with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011*; contains insufficient water to effectively monitor ground water quality; or is improperly located the permittee shall install a replacement well(s) and shall survey the replacement monitoring well(s) within 120 days following notification from NMED.

Replacement well location(s) shall be approved by NMED prior to installation and completed in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011*. The permittee shall submit construction and lithologic logs, survey data and a ground water elevation contour map to NMED within 60 days following well completion.

Upon completion of the replacement monitoring well(s), the monitoring well(s) requiring replacement shall be properly plugged and abandoned. Well plugging, abandonment and documentation of the abandonment procedures shall be completed in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011*, and all applicable local, state, and federal regulations. The well abandonment documentation shall be submitted to NMED within 60 days of completion of well plugging activities.

3. **Exceedance(s) of permitted maximum daily discharge volume** - The maximum daily discharge volume authorized by this Discharge Permit is exceeded by more than ten percent for any four average daily discharge volumes within any 12-week period the permittee shall submit a corrective action plan to reduce the discharge volume for NMED approval.
4. **Exceedance(s) of Nitrogen Loading Limits** - In the event that the SDDS show that the amount of nitrogen in wastewater applied to the surface disposal area in any 12-month period exceeds 200 pounds per acre, the permittee shall propose the reduction of nitrogen loading to the surface disposal area by submitting a corrective action plan to NMED for approval. The plan shall include a schedule for completion of corrective actions and shall be submitted within 90 days following the end of the monitoring period in which the exceedance occurred. The permittee shall initiate implementation of the plan following approval by NMED.
5. **Spills, leaks, unauthorized discharge** – Any spill or release that is not authorized under this Discharge Permit. the permittee shall comply with the requirements of Sections

20.6.2.1203 NMAC, and shall submit to NMED all information or documentation required by the applicable portions of Sections 20.6.2.1203 NMAC.

- C. The permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC, should the corrective action plan not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC within 180 days of confirmation of ground water contamination.

PART C GENERAL TERMS AND CONDITIONS

C100 Introduction

- D. The NMED has reviewed the permit application for the proposed new facility and has determined that the provisions of the applicable groundwater quality standards will be met in accordance with this Discharge Permit. General conditions for all Discharge Permits issued by the Ground Water Quality Bureau pursuant to NMAC 20.6.2 are summarized on **Table C1**. Unless otherwise specified in Parts A or B of this Discharge Permit, both the general conditions for a facility discharge permit (as listed in this part) and facility-specific conditions as listed in **Part B** are mandated to assure continued compliance.

Table C1
General Discharge Permit Conditions:

Engineering and Surveying
a) None required.
Operations and Maintenance
b) Operate in a manner such that standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC are not violated.
c) Install (if not already completed) and maintain fences around the facility to control access by the general public and animals. The fences shall consist of a minimum of six-foot chain link or field fencing and locking gates.
d) Repair or replace compromised pipe(s) or fixture(s) within 72 hours of discovery.
Inspection and Monitoring
d) Visually inspect all facility pipes and fixtures on a weekly basis for evidence of leaks or failure. [20.6.2.3107 NMAC]
Recordkeeping and Reporting
e) Maintain written records at the facility of any inspection(s), repairs and maintenance conducted on facility infrastructure as related the wastewater management system.

Table C1
General Discharge Permit Conditions:

- f) Conduct the monitoring, reporting, and other requirements in accordance with the monitoring requirements of this Discharge Permit. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
- g) Unless otherwise specified by this Discharge Permit, or approved in writing by NMED, the permittee shall use sampling and analytical techniques that conform with the references listed in Subsection B of 20.6.2.3107 NMAC
- h) Unless otherwise identified in this Discharge Permit, submit monitoring reports to NMED according to the following schedule: [Subsection A of 20.6.2.3107 NMAC]
- January 1 through March 31 (first quarter) – report due by **August 1**
 - April 1 through June 30 (second quarter) – report due by **August 1**
 - July 1 through September 30 (third quarter) – report due by **February 1**
 - October 1 through December 31 (fourth quarter) – report due by **February 1**
- i) Retain required records for a minimum period of 10 years from the date of any sample collection, measurement, report or application in accordance with 20.6.2.3107 NMAC, 74-6-5 WQA.

C101 Legal

- A. Nothing in this Discharge Permit shall be construed in any way as relieving the permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders [20.6.2 NMAC].
- B. Pursuant to Section 20.6.2.3109 NMAC, NMED reserves the right to require a Discharge Permit Modification in the event NMED determines that the requirements of 20.6.2 NMAC are being or may be violated or the standards of Section 20.6.2.3103 NMAC are being or may be violated. This may include a determination that structural controls and/or management practices approved under this Discharge Permit are not protective of groundwater quality, and that more stringent requirements to protect groundwater quality may be required by NMED. The permittee may be required to implement abatement of water pollution and remediate groundwater quality.
- C. Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the 20.6.2 NMAC, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [74-6-10 WQA, 74-6-10.1 WQA]

- D. Pursuant to WQA 74-6-10.2(A-F), criminal penalties shall be assessed for any person who knowingly violates or knowingly causes or allows another person to:
1. Make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the WQA;
 2. Falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or
 3. Fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation, is subject to felony charges and shall be sentenced in accordance with the provisions of Section 31-18-15 NMSA 1978.
- E. Prior to the transfer of any ownership, control, or possession of this permitted facility or any portion thereof, the permittee shall notify the proposed transferee in writing of the existence of this Discharge Permit and include a copy of this Discharge Permit with the notice in accordance with 20.6.2.3111 NMAC. The transferee(s) shall notify NMED, in writing, of the date of transfer of ownership and provide contact information for the new owner(s) pursuant to Subsection B of 20.6.2.3111 NMAC.
- F. Pursuant to WQA 74-6-5(o), the Permittee has a right to appeal the conditions and requirements as outlined in this Discharge Permit through filing a petition for review before the WQCC. Such petition shall be in writing to the WQCC within thirty (30) days of the receipt of this Discharge Permit. Unless a timely petition for review is made, the decision of NMED shall be final and not subject to judicial review.

C102 General Inspection and Entry Requirements

- A. Nothing in this Discharge Permit shall be construed as limiting in any way the inspection and entry authority of NMED under the WQA, 20.6.2 NMAC, or any other applicable law or regulation. [20.6.2.3107 NMAC, 74-6-9(B) & (E) WQA]
- B. The permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]:
1. Enter at regular business hours or at other reasonable times upon the permittee's premises or other location where records must be kept under the conditions of this Discharge Permit, 20.6.2 NMAC, or any other applicable law or regulation.
 2. Inspect and copy, during regular business hours or at other reasonable times, any records required to be kept under the conditions of this Discharge Permit, 20.6.2 NMAC, or any other applicable law or regulation.
 3. Inspect, at regular business hours or at other reasonable times, any facility, equipment (including monitoring and control equipment or treatment works), practices or operations regulated or required under this Discharge Permit, 20.6.2 NMAC, or any other applicable law or regulation.
 4. Sample or monitor, at reasonable times for the purpose of assuring compliance with this Discharge Permit or as otherwise authorized by the WQA, any effluent, water contaminant, or receiving water at any location before or after discharge.

C103 General Record Keeping and Reporting Requirements

A. The permittee shall maintain a written record of the following:

1. Amount of wastewater, effluent, leachate or other wastes discharged pursuant to this Discharge Permit. [20.6.2.3107.A NMAC]
2. Operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater; to measure flow rates, to monitor water quality, or to collect other data required by this Discharge Permit. Per Section A of 20.6.2.3107 NMAC, this record shall include:
 - a. Repair, replacement or calibration of any monitoring equipment
 - b. Repair or replacement of any equipment used in the permittee's waste or wastewater treatment and disposal system.
3. Any spills, seeps, and/or leaks of effluent, and of leachate and/or process fluids not authorized by this Discharge Permit. [20.6.2.3107.A NMAC]

B. The permittee shall maintain at its facility a written record of all data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit. The following information shall be recorded and shall be made available to NMED upon request:

1. The dates, exact place and times of sampling or field measurements;
2. The name and job title of the individuals who performed each sample collection or field measurement;
3. The date of the analysis of each sample;
4. The name and address of the laboratory and the name and job title of the person that performed the analysis of each sample;
5. The analytical technique or method used to analyze each sample or take each field measurement;
6. The results of each analysis or field measurement, including raw data;
7. The results of any split sampling, spikes or repeat sampling; and
8. A description of the quality assurance (QA) and quality control (QC) procedures used.

C. The permittee shall furnish to NMED, within a reasonable time, any documents or other information which it may request to determine whether cause exists for modifying, terminating and/or renewing this Discharge Permit or to determine compliance with this Discharge Permit. The permittee shall also furnish to NMED, upon request, copies of documents required to be kept by this Discharge Permit. [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]

C104 Modifications and/or Amendments

A. The permittee shall notify NMED of any changes to the permittee's wastewater treatment and disposal system, including any changes in the wastewater flow rate or the volume of wastewater storage, or of any other changes to operations or processes that would result in any significant change in the discharge of water contaminants. The permittee shall obtain NMED's

approval, as a modification to this Discharge Permit pursuant to Subsections E, F, or G of 20.6.2.3109 NMAC, prior to any increase in the quantity discharged, or any increase in the concentration of water contaminants discharged, above those levels approved in this Discharge Permit [20.6.2.3107.C NMAC].

- B. The permittee shall file plans and specifications with NMED for the construction of a wastewater system and for proposed changes that will change substantially the quantity or quality of the discharge from the system. The permittee shall file plans and specifications prior to the commencement of construction. Changes to the wastewater system having a minor effect on the character of the discharge shall be reported as of January 1 and June 30 of each year to NMED. [20.6.2.1202 NMAC]

Part D MISCELLANEOUS

D100 Acronyms

CL	Chloride
CQA	construction quality assurance
CQC	construction quality control
DP	discharge permit
FEMA	federal emergency management
administration	
FIRM	flood insurance rate map
gpd	gallon per day
LADS	Land Application Data Sheet(s)
mg/L	milligram per liter
mL	milliliters
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMSA	New Mexico Statutes Annotated
NO ₃ -N	Nitrate as Nitrogen
SDDS	Surface Disposal Data Sheet(s)
TDS	total dissolved solids
TKN	total Kjeldahl nitrogen
WQA	New Mexico Water Quality Act
WQCC	Water Quality Control Commission